

ENVIRONMENTAL TOPICAL AREA CONTINUING TRAINING



CERCLA Activities Oversight

SELF-STUDY GUIDE

Produced by
U. S. DOE - Rocky Flats Field Office
Training and Technical Qualifications Group

Additional copies of this guide can be downloaded from the Internet
<http://cted.inel.gov/cted/rfv/video.htm>

GOAL

The goal of this learning activity is for you to apply your knowledge of environmental compliance. This is accomplished through short video vignettes that address common issues and potential problems found throughout DOE facilities. You will be introduced to five key questions that you will use to resolve the issues presented in the vignettes. When you know how to analyze situations and ask the right questions, the issue is mostly resolved.

This is one of three learning activities available to you. This program deals with oversight issues found at a DOE CERCLA site involved in decontamination and demolition activities. The other two videos deal with Oversight at DOE Treatment, Storage, and Disposal facilities and Analytical Laboratories.

MATERIALS

You will need the following materials to complete this self-study activity:

- Program 3 video tape
- A VHS VCR and television monitor
- Pencil or pen for taking notes

PRE-REQUISITES

This is a program of "continuing training." To get the full benefit of these learning activities it is recommended that participants have a basic knowledge of the information found in the Environmental Technical Qualification Program Self-Study Guide. This guide is available from the DOE Clearinghouse for Training, Education and Development web site at <http://cted.inel.gov/cted/trainmat.html>.

HOW TO PROGRESS THROUGH THE ACTIVITY

This self-study guide will take you step-by-step through this activity. It is important to read through these instructions completely before beginning.

The video tape has short vignettes that you will play for a few minutes and, when prompted, stop the tape to review what you saw and record your answers. Do not let the tape continue to play into the next section until you have had a chance to write

down your responses.

An exact duration for this learning activity is not indicated. The length of time it will take to complete depends on how much time you take to answer the questions posed. At least two hours should be allowed.

Be sure to take a break when you need one. Set up the VCR and monitor in front of you in a comfortable position; then begin when you are ready.

BEGIN

INTRODUCTION - Start the video tape. The video begins with a brief introduction and asks the viewer to obtain the correct guide.

PART I - Sharon (the Environmental Programs manager) and Rob (an Environmental Engineer) discuss CERCLA oversight activities.

In the first segment, you should observe the terrain, conditions, and activities that are covered by a regulation or policy that you are expected to apply.

Example: Activities may result in emissions to the air; therefore, you will be concerned with the "Clean Air Act."

Stop the video tape when asked and take a few minutes to answer the five key questions starting on page 5. Then address the question regarding Rob's scope of responsibility. When you are finished compare your answers to the information listed on page 7 and continue the video when ready.

The Five Key Questions

1. "What is happening?"

2. "What 'questions' should I ask?"

3. "What research should I do?"

4. "What 'rules' apply?"

5. "What are the overlaps (interrelationships), if any?"

An added question . . .

What could go wrong?

ANSWERS - The following are answers to the five questions that you should have come up with:

Rob is an experienced Environmental Engineer. His most recent assignment was oversight at the Treatment Storage and Disposal facility on the site. He knew how that facility operated and was fully familiar with the TSD operations, laws and procedures. Much of the waste handled at the TSD came from the CERCLA activities where he is now assigned. Rob's self-confidence and familiarity with TSD functions gave him the belief that the rules were the same. He soon discovers that they are not.

Rob needs to realize that although conditions look similar, the laws are not always the same. A lot is based on judgement, Rob will find that it must be informed judgement - not intuition based on previous experience.

Please note: Conditions and practices at locations across the DOE complex can vary widely. Simply being different does not mean it's wrong. Also, this material is not all-inclusive. You will likely see and discuss issues not mentioned in this guide. Those additional issues are both valid and pertinent to the topic. Such discussion is encouraged.

When asking the "5 Key Questions" Rob should be looking for the following:

1. "What is happening?"

Rob should immediately learn:

- The scope and levels of activity on the site;
- possible sources of emissions and releases, and the potential for these;
- what the people are doing and how they do it; and
- why each person is performing a particular task.

Rob should perform a preliminary survey of the facility's operations. This is to determine obvious "good" and "bad" practices. Although a CERCLA activity may look disorganized, order and organization should be evident. Good order and organization of the activity and the professional manner in which personnel perform their work are good indicators of how well the facility is in compliance with state and Federal laws. Likewise, disorder and poor organization are

indications that people may be unprofessional and not well disciplined in their work practices. These are good indicators that state and Federal laws are not being adhered to.

Rob should be evaluating the approaches to the cleanup. He should be evaluating if the site is working under one Record of Decision (ROD) or if it operating under several RODs (a "piecemeal" approach). He should be evaluating which activities are covered under removal actions, and of the activities covered under removal actions, which are time-critical and which are non-time critical. He should be evaluating any *written* agreements that may waive substantive requirements during time-critical and non-time critical removal actions.

2. "What 'questions' should I ask?"

Rob needs to ask "What permits are required for this site to operate?"

Next, he will want to know who is in charge? . . . what is the organization structure? . . . what is the history of operations and any related problems? . . . and what are the current "hot" issues?

It appears that the facility has not completed the remedial investigation and feasibility study (RI/FS). How does the facility place newly discovered areas of contamination into the administrative record? As an ancillary issue of the evaluation and testing processes, how does the facility handle their investigative derived waste (IDW)?

3. "What research should I do?"

It will be necessary for Rob to obtain copies of the ROD(s) for review of activities to be conducted, identification of CERCLA waste management units and applicable areas of contamination (AOCs) to be employed during CERCLA remediation activities and the assignment of applicable or relevant and appropriate requirements (ARARs) or to be considered.

What risks are associated with this activity? CERCLA requirements vary depending on the risks posed. Response actions must be those most appropriate to address the risks.

Rob needs to examine the decontamination and decommissioning (D&D)

aspects of the program to determine if all the D&D activities are covered under the CERCLA administrative process or are some of them covered outside of this process.

For a CERCLA operation much of the research also involves determining what rules apply.

4. "What 'rules' apply?"

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides authority to respond to releases or threatened releases of hazardous substances to DOE decommissioning activities when jurisdictional thresholds established by CERCLA are met.

Even though CERCLA will apply to most decommissioning activities, the type of CERCLA response action for a given facility and how the response should be implemented must be determined. CERCLA applicability means that decommissioning activities must proceed consistent with a specific statutory and regulatory framework that provides significant authority to DOE as well as significant compliance and oversight responsibilities for EPA, States, and stakeholders. Who are the stakeholders and what are their interests?

- Decommissioning activities must be conducted in a manner consistent with CERCLA response authority.
- DOE, under authorization of Executive Order 12580, determines the most appropriate response to prevent or eliminate risks from releases or threatened releases of hazardous substances to the environment.
- Examination of any ongoing discharges, i.e., water and air, subject to the Clean Water Act (CWA) or Clean Air Act (CAA) that are not part of their CERCLA administrative process should be carefully examined.

Some activities although being conducted on the CERCLA site may be clearly RCRA and subject to the RCRA rules. For example, light bulbs collected on the CERCLA operation and not properly containerized and stored as required by 40 CFR 261.1 and 262.34 are subject to RCRA rather than the CERCLA administration [see <http://www.tis.eh.doe.gov/others/ll/lmes/100054.txt>]

Rob must be careful not to overlook "cultural resources" which can be of many

types. Archaeological resources are but one part of the cultural resources concept. The abandoned buildings may be subject to the 1966 Historic Preservation Act. Each state may have its own version of Historic Preservation and even though the abandoned buildings are part of the CERCLA site they may still be of historic significance.

5. "What are the overlaps (interrelationships), if any?"

DOE exercise its CERCLA authority in conjunction with the Environmental Protection Agency (EPA) and DOE stakeholders, e.g., state environmental quality agencies, counties and Indian Tribes.,

DOE and EPA develop an Interagency Policy to facilitate streamlined compliance of decommissioning activities with CERCLA requirements.

What could go wrong?

Rob could assume that his experience and knowledge from performing oversight at the Treatment, Storage and Disposal Facility would be directly transferrable to oversight at the CERCLA site. Initially, Rob made that assumption and arrived at some incorrect conclusions. He risks making inappropriate decisions that can jeopardize operations at the site. When realized, this caused Rob to question his competence and erodes his self-confidence. It also strains relations with the site manager and key decisions are affected.

RESTART THE TAPE

PART II - This time be more specific in your responses. Identify the activities being performed and, more precisely, what are the requirements.

Example: Rob applied laws in effect for the TSD to operations at the CERCLA site. Those laws didn't apply.

Before you stopped the tape, Sharon asked the five key questions.

1. "What is happening?"
2. "What 'questions' should I ask?"
3. "What research should I do?"
4. "What 'rules' apply?"
5. "What are the overlaps (interrelationships), if any?"

Sharon also will ask about the issues Rob is facing - the risks and priorities.

Stop the video tape when asked and take a few minutes to answer the five key questions by indicating what actions Rob should take. These questions start on page 12. When you are finished compare your answers to the information listed on page 13 and continue the video when ready.

The Five Key Questions

1. "What is happening?"

2. "What 'questions' should I ask?"

3. "What research should I do?"

4. "What 'rules' apply?"

5. "What are the overlaps (interrelationships), if any?"

ANSWERS - The following are answers to the five questions that you should have come up with:

1. "What is happening?"

Rob only looked at the remedial action plan and D&D plan. [NOTE: There is an assumption that the remedial action plan is a summary of the ROD activities.] It is possible that the two documents do not clearly describe the whole picture of the activity(s) being covered.

By all appearances the activity is well run and managed. The immediate handling of the discovery of what appeared to be Indian archeological remains demonstrates thorough training and familiarity with procedures for emergency response. This level of professionalism should have been a positive signal to Rob.

2. "What 'questions' should I ask?"

The key question for Rob at this point is "What rules do apply?" Rob is operating under an old set of rules that have gotten in the way of good oversight.

If I was wrong in this area, was I wrong in other decisions? Which ones?

Was I right to shut down the operations?

3. "What research should I do?"

What does the site ROD say? Rob had checked the Remedial Action Memo and the demolition plan but failed to review the ROD.

Removal actions can occur prior to the ROD but it should be mentioned in the ROD that the removal action did occur.

A waste pile that is not covered under the CERCLA record would be fully subject to RCRA [or in the case of the Toxic Substances Control Act (TSCA)].

Although the CERCLA action is Federal, the state regulator could involk a regulatory noncompliance for a RCRA or TSCA violation when it fell out of the CERCLA action.

4. "What 'rules' apply?"

The guiding document for this CERCLA activity is the site ROD. According to the site manager, all operations are being conducted according to the ROD. Areas that needed clarification had been raised to the EPA and had been resolved. Rob needs to learn the details of the ROD and any clarifying guidance provided by the EPA. [NOTE: Guidance documents are *only guidance*. Guidance documents have no statutory authority. Likewise, verbal guidance provided by "official" personnel from any agency is only worth the paper it is printed on.]

5. "What are the overlaps (interrelationships), if any?"

In this instance, it is knowing what overlaps to look for. Some rules DO NOT conflict or overlap. Rules under RCRA and OSHA that deal with treatment storage and disposal operations do not normally apply to a CERCLA activity. Rob needs to get to the point where he fully understands the regulations dealing with CERCLA remediation and D&D functions and does not confuse them with provisions for TSD operations.

The issue of the waste piles may have been valid if they were not addressed in the ROD. According to the site manager they were - but, Rob wasn't sure. Taking action as serious as shutting down a work site should be done with good reason and after confirming the basis. Note that there did not appear to be an eminent health or safety risk. In this case Rob was wrong.

RESTART THE TAPE

Rob and Sharon have discussed his situation. Sharon asks you to recommend the action that Rob should take.

[illegible]

ANSWERS - The following are recommended solutions that you should have come up with:

This is a case where Rob got off on the wrong foot. He neglected to do the research necessary to perform oversight effectively. He believed that prior experience was enough.

Rob could have been correct in his interpretation. The waste piles may not be identified in any CERCLA administrative process. He will have to check and make certain that it was not a result of a time critical removal action (no public input but there should be some kind of documentation of the decision(s) made). Rob only looked at the remedial action plan and D&D plan. There is an assumption that the remedial action plan is a summary of the ROD activities. It is possible that the two documents do not clearly describe the whole picture of the activity(s) being covered.

Rob acted before he had a full understanding of the rules and procedures for this operation. He could have taken time to listen and to probe the differences in perspective that appeared to Rob to be signals of Seymour's nonresponsiveness. When Rob and Seymour saw things differently Rob could have asked Seymour to explain the basis for his actions, "Seymour, help me to understand your position." This would have lead to discussions of the ROD and the realization that Rob was applying the wrong standards to activities on this CERCLA project.

It isn't easy to admit you made a mistake. But, it goes a long way in regaining your credibility and respect.

RESTART THE TAPE

PART IV - Gathering your Resources

Creating a reference library for every project is a good idea. Along with the expected volumes of regulations and files of permit information there are other resources that can prove useful:

A list of colleagues in similar positions across the complex

A file of newspaper and magazine clippings

An Internet mail list where these topics are discussed.

A list of Internet web sites where this kind of data is available. The following is a short list of some web sites that environmental engineers might find useful. Add these to your "Hot list."

<http://www.earth1.epa.gov/docs/ERNS/docs/cercfact.html>

Fact sheets on Emergency Response Notification System and CERCLA

http://www.ornl.gov/Env_Rpt/csepcra.html

Emergency Planning and Community Right-to-Know

http://www.ornl.gov/Env_Rpt/cscercla.html

Comprehensive Environmental Response, Compensation, and Liability Act

http://www.ornl.gov/Env_Rpt/csintgrt.html

RCRA/CERCLA Integration

http://www.ornl.gov/Env_Rpt/cstable1.html#RCRA

1993 ORR ASER Compliance Summary Tables

<http://www.inel.gov/environment/tools/ffa-co-6.html>

Negotiation of a CERCLA Federal Facilities Agreement

<http://www.em.doe.gov/dd/fctsht1.html>

Questions and Answers - D&D/CERCLA

<http://www.em.doe.gov/dd/fctsht5.html>

For More Detailed Information

<http://tis.eh.doe.gov/docs/egm/gen/gen.0102.txt>
Comparison of RCRA/CERCLA Cleanup Processes

<http://www.em.doe.gov/dd/cercla.html>
Application of CERCLA Response Authority to Department of Energy
Decommissioning Activities

<http://www.tis.eh.doe.gov/others/ll/lmes/100054.txt>
RCRA Hazardous Waste Within CERCLA Boundaries

http://www.osha-slc.gov/OshDoc/Interp_data/INTERP_19921223B.html
EPA CERCLA Regulations and Site Monitoring Requirements of 1910.120.

<http://www.cedar.univie.ac.at/arch/enveng-1/95oct/msg00071.html>
State vs. CERCLA on Permits

This is not a comprehensive list. Once you begin seeking out these documents the sites where they are found will lead you to even more material.

Happy Surfing.